

# Notice of Allowability

Application No.

10/780,568

Examiner

Michael A Marcheschi

Applicant(s)

OTA ET AL

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed on 2/19/04.
2. ☒ The allowed claim(s) is/are 1-6.
3. ☒ The drawings filed on 13 July 2004 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☒ Certified copies of the priority documents have been received in Application No. 10/015,675.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 2/19/04, 5/20/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

MICHAEL A MARCHESCHI  
PRIMARY EXAMINER

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An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jude L. Cooney on 12/29/04.

The application has been amended as follows:

**ABSTRACT:**

Please rewrite the abstract as follows in order to comply with the requirement that the abstract be in single paragraph form **(no changes in the content of the abstract are being made)**.

--There is provided an abrasive used for polishing a substrate which comprises silica as a main component, for example a rock crystal, a quartz glass for photomask, for CMP of an organic film, Inter Layer Dielectric (ILD) and shallow trench isolation of a semiconductor device, or for polishing a hard disk made of glass. A sol which particles are dispersed in a medium, wherein the particles have a particle size of 0.005 to 1  $\mu\text{m}$  and comprise as a main component crystalline cerium oxide of the cubic system and as an additional component a lanthanum compound, a neodymium compound or a combination thereof, wherein the additional component is contained in  $X/(Ce + X)$  molar ratio of 0.001 to 0.5 in which X is lanthanum atoms, neodymium atoms or a combination thereof. The sol is prepared by reacting an aqueous solution which a cerium (III) salt is mixed with a lanthanum (III) salt and/or a neodymium (III) salt, with an alkaline substance to give a suspension in which cerium (III) hydroxide is homogeneously mixed with lanthanum (III) hydroxide and/or neodymium (III) hydroxide, and blowing oxygen or a gas containing oxygen into the suspension.--

**CLAIMS:**

Claim 1, line 9, cancel "ration" and insert --ratio--.

The following is an examiner's statement of reasons for allowance:

The prior art of record fails to teach or suggest a process for producing a sol which comprises all of the claimed specific steps (i.e. reacting step of all of the recited components added and blowing step). A sol prepared by reacting an aqueous solution which a cerium (III) salt is mixed with a lanthanum (III) salt and/or a neodymium (III) salt and with an alkaline substance to give a suspension in which cerium (III) hydroxide is homogeneously mixed with lanthanum (III) hydroxide and/or neodymium (III) hydroxide and blowing oxygen or a gas containing oxygen into the suspension is not defined by the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

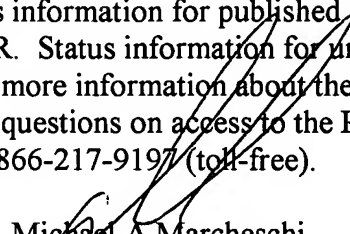
The references cited on the 1449 have been reviewed by the examiner and are considered to be art of interest since they are cumulative to or less than the art relied upon in the above rejections. The references cited on the instant 1449's have been received in the parent application. Any foreign language documents submitted by applicant has been considered to the extent of the short explanation of significance, English abstract or English equivalent, if appropriate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael A Marcheschi whose telephone number is (571) 272-1374. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L Bell can be reached on (571) 272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Michael A Marcheschi  
Primary Examiner  
Art Unit 1755

12/29/04  
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